

## **ABSTRACT**

First, a substrate is provided, and a half-tone mask is employed to perform an exposing and developing process for forming a plurality of photoresist patterns having different thickness. Then, a flow process is performed to heat the photoresist patterns so that each photoresist pattern has a microlens surface. Following that, a metal plate is formed on the substrate for obtaining a plurality of patterns, which are opposite to the plurality of photoresist patterns, on the bottom surface. Finally, the metal plate is removed from the substrate, and combined with an insert mold.